

Claims

1. Double-row antifriction bearing (1) which has
a one-piece bearing ring (2) and
a bearing ring (3) divided into two parts in the axial direction, and
rolling elements (4, 5) located between them,
the rolling elements (4) of the first row (6) of rolling elements having a first diameter (d_1) and the rolling elements (5) of the second row (7) of rolling elements having a second diameter (d_2) which is different from the diameter (d_1) of the rolling elements (4) of the first row (6) of rolling elements,
characterized in that
the antifriction bearings (4, 5) consist of ceramic material and the contact angle (α_1) of the first row (6) of rolling elements is different from the contact angle (α_2) of the second row (7) of rolling elements.
2. Antifriction bearing as claimed in claim 1, wherein the one- piece bearing ring (2) is the outer ring and the split bearing ring (3) is the inner ring of the antifriction bearing (1).
3. Antifriction bearing as claimed in claim 1 or 2, wherein the contact angle (α_1) of the first row (6) of rolling elements is in the range between 5° and 35° .
4. Antifriction bearing as claimed in one of claims 1 to 3, wherein the contact angle (α_2) of the second row (7) of rolling elements is in the range between 10° and 60° .

5. Antifriction bearing as claimed in one of claims 1 to 4, wherein the outer ring (2) has a flange (8) molded on in one piece.

6. Antifriction bearing as claimed in claim 5, wherein the flange (8) with respect to its axial position is located at the height of one of the rows (6, 7) of rolling elements.

7. Antifriction bearing as claimed in one of claims 1 to 6, wherein lubrication openings (10) are made in the contact area of the front surfaces (9) of the split bearing ring (3).

8. Antifriction bearing as claimed in one of claims 1 to 7, wherein the outer ring (2) is provided with lubrication openings, especially with lubrication holes.

9. Antifriction bearing as claimed in one of claims 1 to 8, wherein the rows (6, 7) of rolling elements have cages (11) which are guided on one shoulder (12) of at least one of the bearing rings (2, 3).

10. Antifriction bearing as claimed in claim 9, wherein the cages (11) are guided on a shoulder (12) of the split bearing ring (3).

11. Antifriction bearing as claimed in claim 9 or 10, wherein the cage (11) consists of plastic, preferably of PEEK.

12. Antifriction bearing as claimed in one of claims 1 to 11, wherein the rolling

elements (4, 5) are balls.

13. Antifriction bearing as claimed in one of claims 1 to 12, wherein it is made as an angular contact bearing.

14. Antifriction bearing as claimed in one of claims 1 to 13, wherein it is a component of a transmission which in operation has a very high rpm and high temperature, preferably in a race car.